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TRANSACTIONS OF THE LINCOLNSHIRE NATURALISTS' UNION

Vol. XVIII No. 3 Part 1
1974

Edited by
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Headquarters: City and County Museum, Lincoln

Lincolnshire Naturalists Union

Founded June 12th, 1893

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PRESIDENTIAL ADDRESS

Delivered at Lincoln on 2nd March, 1974

by

G. L. A. POSNETT, M.S.S.CH., M.B.CH.A.

NATURAL HISTORY OF LINCOLN SOUTH COMMON — A 25 YEAR STUDY

Introduction

On the 25th February, 1301, Edward I sanctioned a Charter conferring the "citizens privileges" on the City of Lincoln. This included the Rights of Common Land, and was made at Nettleham, near Lincoln. At the time of the Enclosure Act (1803) Lincoln had five commons, totalling 560 acres. The South or Canwick Common then covered 244 acres. Today it is reduced to 164 acres, of which 60 are laid out as a golf course. On the northern part, which is level, are four football pitches.

Registered as Common Land, this open space is the last large tract of undisturbed pasture land left between the Trent Valley and the coast. There are five ponds on the Common. Two are man-made, the other three created by natural seepage of water. Springs and rainfall maintain the level of the water in three of them.

Over the years green-keepers have altered the natural drainage in an effort to keep the golf course greens in a drier state. This has created several marshy areas, which in the last 10 years have been colonised by marsh-loving plants. Most of the mature trees have been planted during the last 70 years and include Ash, Lime, Sycamore, Horse Chestnut, Oak, Beech, Wych and Common Elm. The trees inside the plantations have in addition, False Acacia and Holly. The area near the houses is damp and much disturbed due to pipe laying. A stream was piped when temporary golf club premises were built.

The lower portion of grassland is mostly on sand. As you climb the slope you walk over Lias Clays. Within these clays are bands of nodular limestone. Many exposed are the size of a football. The area is uneven due to landslip. This escarpment of the Lincoln Heath forms the southern side of the Lincoln Gap. The top path and bankside is covered with a thin layer of sand on Lincolnshire Limestone giving a different flora. From this path one gets commanding views of Lincoln and parts of the Trent Valley. It also shows the size of the Lincoln Gap.

Having walked the Common daily, except for the Second World War years and holidays, I have come to regard the area as my own nature reserve.

Grasses

Despite the grazing of over 30 horses (there have been no cattle for several years) the grasses are a delight to see for several months. The following have been identified by myself and other botanists, a total of 23 grasses, and no doubt there are several more waiting to be identified:

Red Fescue (*Festuca rubra*), Crested Hairgrass (*Koeleria cristata*), Tufted Hairgrass (*Deschampia caespitosa*), Wavy Hairgrass (*D. flexuosa*), Annual Meadow Grass (*Poa annua*), Common Meadow Grass (*P. pratensis*), Rough Stalked Meadow Grass (*P. trivialis*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Italian Rye Grass (*Lolium italicum*), Common Rye Grass (*L. perenne*), Yellow Oat Grass (*Trisetum flavescens*), Yorkshire Fog (*Holcus lanatus*), Cocksfoot

(Dactylis glomerata), Meadow Foxtail Grass *(Alopecurus pratensis)*, Slender Foxtail Grass (*A. myosuroides)*, Common Catstail Grass *(Phleum pratense)*, Barren Brome Grass *(Bromus sterilis)*, Soft Brome Grass *(B. mollis)*, Tall False Oat Grass *(Arrhenatherum elatius)*, Squirrel-Tail Fescue *(Vulpia bromcides)*, Meadow Barley *(Hordeum secalinum)*, Loose Silky Bent Grass *(Apera spica-venti)* ,Creeping Bent Grass *(Agrostis stolonifera)*.

The middle of April sees the fairways that have kept moist covered with Field Woodrush *(Luzula campestris)*. The almost black flower heads have caused country children to name it Sweeps Brushes, Good Friday Grass and many other names. From early June the boggy places on the heavy clay carries several plants of Jointed Rush *(Juncus articulatus)*. This is one of the common rushes to be found in Britain.

Near the top walk, in a very damp clayey area, a sedge first recorded in 1851 still survives. This is Flat-headed Sedge, or Flattened Blysmus *(Blysmus compressus)*.

Fungi

The late Mrs. Murfin, who was at one time Lady Mayor of Lincoln, told me she had identified over 40 different fungi on the common. My list to date is 18. They are: Parasol Mushroom *(Lepiota procera)*, Common Mushroom *(Agaricus campestris)*, Horse Mushroom *(A. arvensis)*, Blewitts (Blue stalks) *(Tricholoma personatum)*, Fairy Ring Champignon *(Marasmius oreades)*, Common Puff Ball *(Lycoperdon perlatum)*, Cramp-Balls *(Daldinia concentrica)*, Coral Fungi *(Clavaria fusiformis)*, Dung Fungi *(Panaeolus campanulatus, Stropharia semiglobata* and *Mycena avenacea)*, Common Ink-Cap *(Coprinus atramentarius)*, Miniature Ink-Cap, Candle Snuff *(Xylaria hypoxylon)*, Jew's Ear *(Auricularia judae)*, Bracket Fungi *(Stereum purpureum* and *Polystictus versicolor)*, Dryad's Saddle *(Polyporus squamosus)*.

Flowers of the Grasslands

The common Daisy can be found flowering almost every month of the year. Lesser Celandine *(Ranunculus ficaria)* blooms the end of February. Masses of Dandelions appear the first week in April, followed by the Bulbous Buttercup *(R. bulbosus)* and two weeks later the Meadow Buttercup *(R. acris)*. With a much damper situation the Lady's Smock *(Cardamine pratensis)* has increased and spread to many new areas. However, Meadow Saxifrage *(Saxifraga granulata)* has almost disappeared and thrives in one area only. This is no doubt due to the change in the drainage. Other flowers recorded consist of 15 different families, giving a grand total of 45 plants.

Check list:

Yarrow *(Achillea millefolium)*, Common Ragwort *(Senecia jacobaea)*, Lesser Knapweed *(Centaurea nigra)*, Common Catsear *(Hypochoeris radicata)*, Mouse-ear Hawkweed *(Hieracium pilosella)*, Creeping Thistle *(Cirsium arvense)*, Spear Thistle *(C. vulgare)*, Marsh Thistle *(C. palustre)*, Musk Thistle *(Cardous nutans)*, Rest Arrow (Spiny) *(Ononis repens)*, Black Medick *(Medicago lupulina)*, Red Clover *(Trifolium)*, White Clover *(T. repens)*, Haresfoot Clover *(T. arvense)*, Strawberry Clover *(T. fragiferum)*, Hop Trefoil *(T. campestre)*, Common Birds-foot Trefoil *(Lotus corniculatus)*, Lady's Bedstraw *(Galium verum)*, Heath Bed-straw *(G. saxatile)*, (the latter in one place only), Field Mouse-ear *(Cerastium arvense)*, Common Mouse-ear Chickweed *(C. holosteoides)*, Lesser Stitchwort *(C. graminea)*, Tormentil (*Potentilla erecta)*, Creeping Cinquefoil *(P. reptans)*, Self-heal *(Prunella vulgaris)*, Heath Speedwell *(Veronica officinalis)*, Birdseye

Speedwell *(V. chamaedrys)*, Ratstail Plantain *(Plantago major)*, Ribwort Plantain *(P. lanceolata)*, Hoary *(P. media)*, Sheep's Sorrel *(Rumex acetosella)*, Common Sorrel *(R. acetosa)*, Harebell *(Campanula rotundifolia)*, Bluebell *(Hyacinthoides non-scripta)*.

The bluebell has only been found during the last three years. It is in such a remote place that it cannot be classified as an escape. Autumn Gentian was first noted in 1968. It flowered again in 1972 but not in 1973. There have been only two spikes and each one has been subject to trampling by horses. On the rising ground Pignut *(Conopodium majus)* favours the light sandy soil.

Gorse *(Ulex europaeus)* grows in two areas. Regular mowing of the golf fairways, together with human pressure on a man-created path, has resulted in the total loss of Lady's Mantle *(Alchemilla vulgaris)*. For the same reasons Rest Arrow and Harebell are not so common as 10 years ago.

Marshy Areas

One exceptionally good marshy area covers at least a quarter of an acre. This is the result of drainage from one of the fairways and has developed in the last 15 years. It contains masses of Lesser Spearwort *(Ranunculus flammula)*, odd plants of Celery-leaved Buttercup *(R. sceleratus)*, Marsh Thistle, Brooklime *(Veronica beccabunga)*, Marsh Penny Wort (*Hyorocotyle vulgaris)*, Bog Stitchwort *(Stellaria alsine)*, Great Willow Herb *(Epilobium hirsutum)*, Hoary Willow Herb *(E. parviflorum)*, Marsh Horsetail *(Equisetum palustre)*, and Soft Rush *(Juncus effusus)*.

Where drainage is poor the Marsh Marigold *(Caltha palustris)* continues to spread, and Devil's-bit Scabious *(Succisa pratensis)* can be found in several places. This proves the common is now much wetter than before the golf course was laid out.

The Top Walk

One of the features of the top walk is the fine specimen trees of Beech, Ash and Elm. There is a good Hawthorn hedge, giving protection from S.E. winds, and many mature Thorns. Additional trees have been planted, such as Birch, Holly, Blackthorn and Laurel. Elder used to be very common but is now drastically controlled. There are several Privet bushes and a good screen of Snowberry. Every five or seven years the bushes are cut back to keep the path open and to maintain the open view. The flora is not abundant on the bank-sides of the walk. However the following have been recorded:

Oxford Ragwort *(Senecio squalidus)*, Groundsel *(S. vulgaris)*, Ox-eye Daisy *(C. leucanthemum)*, Burdock (*Arctium minus)*, Nipplewort *(Lapsana communis)*, Goatsbeard *(Tragopogon pratensis)*, Goosegrass *(Galium aparine)*, Garlic Mustard *(Alliaria petiolata)*, Red Campion *(Melandrum dioicum)*, White Campion *(M. album)*, Barren Strawberry *(Potentilla sterilis)*, Herb Bennet *(Geum urbanum)*, Hedge Wound Wort *(Stachys sylvatica)*, Black Horehound *(Ballota nigra)*, Red Dead Nettle *(Lamium purpureum)*, White Dead Nettle *(L. album)*, Ground Ivy *(Glischoma hederacea)*, Field Bindweed *(Convolvolus arvensis)*, Great Bindweed *(Calystegia sepium)*, Bittersweet *(Solanium dulcamara)*, Oregon Grape *(Mahonia aquifolium)*, White Bryony *(Bryonia didica)*, Black Bryony *(Tamus communis)*, Common Mallow *(Malva sylvestris)*, Ground Elder *(Aegopodium pudagraria)*, Hedge Parsley *(Torilis japonica)*, Cow Parsley *(Anthriscus sylvestris)*, Hogweed *(Heracleum sphondyllium)*, Rough Chervil *(Chaerophyllum temulentum)*, Wild Rose *(Rosa canina)*, A total of 29.

Butterflies

The most common butterfly recorded is the Green-veined White. However, these insects have never been numerous. Large Whites are usually seen on the Lesser Knapweed and Small Tortoiseshells on Ragwort. The brambles attract the Small Coppers and Meadow Browns. The variety of grasses are the saviours of the Small Heath. A small colony of Wall has survived over the years and are usually seen on the *Ragwort* flowers, together with odd recorded Ringlets. When the Privet bushes are in bloom odd Peacocks and Red Admirals have been noted. Despite the large beds of Lady's Smock, no butterflies seem to be attracted by the flowers, although odd Skippers have been recorded.

Moths

Yellowtails are quite common, no doubt due to the many hawthorn bushes. Mother-of-Pearl can always be found by disturbing the nettles. Among the taller grasses Bordered Broadbar and White Wave can be noted. Nettles are also the favourite resting plants for Angle Shades. The privet flowers are a great attraction to Rustic and Feathered Thorn moths. In 1962 I found the caterpillars of the Privet Hawk Moth, but have not recorded since. Despite good numbers of Ragwort Plants, the Cinnabar Moth caterpillars are rarely seen. Another day flying moth is the Magpie.

The Ponds

The pond near Canwick Hill has never carried any water plants and apart from cattle using it, is of no value. Dutch Poplar trees once screened both plantation ponds. These were felled many years before the Second World War. South-westerly winds had made them all lean and they were considered unsafe, though this was very doubtful.

The north-easterly plantation contains Hawthorn, Holly, Beech, Chestnut, False Acacia and Elm. On the island have been planted Birch, Poplar and Laburnum. The pond has never shown much aquatic life. It is usually covered with Duckweed. They are Lesser Duckweed *(Lemna minor)* and Greater Duckweed *(L. polyrrhiza)*. It also contains Water Starwort *(Callitriche sp.)* Broad-leaved Pondweed *(Potamogeton natans)*, and around the pond edge is Reed Sweet Grass *(Glyceria maxims)* and one small patch of Trifid Bur-Marigold *(Bidens tripartita)* and Brooklime. The Frogs use the pond for spawning usually around March 18th. I once saw a Heron retrieve a Swan Mussel *(Anodonta cygnea)* from the pond. Moorhens nest on the island and Water Voles breed in the bankside.

The second plantation pond is much richer in life and plants. It also contains fish such as Pike, Perch, Silver Bream and Tench. These were originally introduced by an angler over 30 years ago and were unused live-bait and specimen fish. The trees are similar to the other plantation with the addition of Hornbeam ,Oak and Sycamore.

Aquatic plants include Canadian Pondweed *(Elodea canadensis)*, Ivy-leaved Duckweed *(L. trisulca)*, a large patch of Pondweed, Water Plantain *(Alisma plantago-aquatica)*, Brooklime, Floating (Flote) Sweet Grass *(Glyceria fluitans* and *G. plicata)* and Branched Bur-reed *(Sparganium erectum)*.

Surface Pond Skaters, Water Boatmen, Whirligig Beetles and Water Mites inhabit the pond. Also found are Great Pond Snails *(Limnaea stagnalis)*, Flat Ramshorn *(Planorbis complanatus)*. The larvae of the Holly Leaf Miner, a very small fly, eats the leaf tissues of this bush, then pupates within the leaf. This is very evident in this plantation.

The island is the nesting site of the Mallard. Each breeding season at least two pairs bring off two broods of ducklings. These are either taken by the pike or killed by youths. The average to reach flying stage over the last 10 years is two. Coltsfoot grows on the heavy clay soil round the pond.

The House Martin Pond

Whereas the first pond is contained, the second has an outlet into an unfenced pond. The depth varies according to the rainfall and is often almost dry during the summer months. It is used by the cattle mostly for cooling their feet.

The pond has contained Sticklebacks and Minnows for years and is named by children as the Stickleback Pond. Near the inlet can be found Watercress *(Rorippa nasturtium-aquaticum)*. Great Willow Herb, Water Plantain and Brooklime. Water Crowfoot *(Ranunculus aquatilis)* covers the pond with white flowers from late April to early June. The Great Pond Snail inhabits the water. Round the pond is a favourite habitat for House Martins in particular, and also Swallows, to collect nesting material.

Top Pond

This pond is situated in an area of thorn scrub. It is fed by a spring from the hillside. Parts of the area where the spring flows is very dangerous, as the mud in places is deep and one can easily get bogged.

Reedmace grows in the centre, also Great Willow Herb. This gives good cover for the several pairs of Moorhens that nest there. Growing in the water is Canadian Pondweed, Hornwort *(Ceratophyllum demersum)*, Water Starwort and Water Crowfoot. It is also a good breeding pond for frogs and toads.

In this pond two different Water Beetles have been noted, but not definitely identified. Odd Small China Mark Moths *(Cataclysta lemnata)* have been seen on the wing in July. On a few occasions Damsel Flies and Dragonflies have been observed near the pond. These were not identified. On the fringes of the pond can be found Fool's Watercress *(Apium nodiflorum)* and Lesser Water Parsnip *(Berula erecta)*.

Mammals

There is a large population of Moles. One early morning during Spring I observed a fox catching moles and eating part of them. It is not uncommon to see Hedgehogs and Stoats on the top walk. Rabbits and Hare are also present. The short-tailed Field Vole and the Common Shrew are other grassland dwellers.

Bird Life

Whereas the golf course has resulted in the loss of several flowering plants, so it has been the means of encouraging several unusual birds. Prior to the establishment of the golf course no Wheatears were recorded on the common. Now they regularly visit each year. The second week in April is the earliest date I have recorded them and on two occasions they have stayed and bred. Early September they appear again and usually stay for a week before migrating.

The Yellow Wagtail was more numerous when cattle grazed the Common, hence the name "cow birds". They have bred several times and can be seen from the middle of April usually on the greens. In 1952 the Corncrake bred and reared 8 young. The area they chose was near the top of Cross o' Cliff hill, on the rough rising ground. As a boy I remember that they regularly bred on the "Hillies" which is land on the western side of Cross o' Cliff Hill.

A pair of Oystercatchers came in 1958 during the Spring and were regularly seen by the golfers. They attempted breeding in a field at the top of the common. Three eggs were laid, but the carrion crows got these.

Perhaps the most outstanding breeding record was in 1961. On March 24th the mating call of the Nuthatch was heard. A week later the Spring Song, with the bubbling finish, was recorded and a pair was seen on a Wych Elm. On April 20th the birds were collecting dead twigs off the Elms and taking mouthfuls to the top pond. The twigs were rolled in the mud until they reached the size of small hazel nuts. They then flew to a big elm on the top walk and entered a nesting hole, which was roughly 20 feet from the ground. The nest and door was completed in one week. During the incubation the male spent its time either singing on a nearby tree or feeding the hen bird. On May 24th both birds were feeding the young. Two weeks later they departed. At the same time a pair bred in a small spinney at Branston.

The Blackbird is the most common resident bird and the Common supports usually 10 pairs of Larks and equal numbers of Meadow Pipits. Each Autumn there is an influx of Kestrels and one particular day 10 were hawking the top area at the same time. Twice they have bred on the top walk.

The Tree Pipit bred two consecutive years. Wrens are quite common and often use thorn bushes for nesting places. A favourite breeding place for the Willow Warbler is the area near the top of Cross o' Cliff Hill and the same rough ground attracts the Common Whitethroat. Twice the Turtle Dove has bred in the same area. Dunnocks are not really choosy where they nest and many years ago they fed a cuckoo until through sheer desperation they abandoned it. However, it survived. The favourite flight place of the Cuckoo is the top walk.

Last year I found 10 Larks' nests, most of them on the rough rising ground. The protecting posts for trees are favourite song perches for these birds. Usually two pairs of Snipe successfully breed in the lower boggy area, and occasionally Green Plover.

Other breeding birds are: Meadow Pipit, Robin, Song Thrush, Mistle Thrush, Rook, Carrion Crow and Jackdaw (90% seen on the Common have numerous white feathers in their wings), Chaffinch, Bullfinch, Linnet, Goldfinch, Yellow Hammer, Reed Bunting, Garden Warbler, Blackcap, Blue Tit, Great Tit, Longtail Tit, Wood Pigeon, Starling, Tree Sparrow, House Sparrow, Moorhen (when hard weather comes and the ponds freeze over the Moorhens disappear but return as soon as the thaw is over), Mallard, Partridge, Pheasant. Breeding birds total 42.

Casual visitors number 16. These include: Kingfisher, Green Woodpecker, Greater Spotted Woodpecker, Lesser Spotted Woodpecker, Redpoll, Redshank, Greenfinch, Brambling, Willow Tit, Water Pipit (1962), Coal Tit, Pied Wagtail, Grey Wagtail, Heron, Whoopoe (1959), Magpie, Great Grey Shrike 1970.

On November 4th, 1962, 156 (count) Pink-feet Geese became stormbound and spent the night on the common. The Hawthorn scrub is vital to the birds of the Thrush family. The berries giving a valuable food supply in the Autumn. Small numbers of Fieldfares arrive early September and build up to good flocks. They often stay on until late May.

November is the time for the Redwings. They can be seen mating at the beginning of March, when they give their Spring song (trui — 3 times). Some hang on until the end of April. When the hawthorn berries are exhausted the Fieldfares and Redwings work the molehills for insect life.

The total number of birds recorded is 70. This number includes Herring Gull (greatest count 52), Black-headed Gull, Lesser Blackbacked Gull, Swallow, House Martin, Collard Dove, Common Buzzard and a Wood Lark. The Woodlark obliged with its lovely song for three days before moving on.

Conclusion

The Common has never benefited from a fund created by the sale of common land. It was supposed to be used for drainage and tree planting. Many mature trees have disappeared during the last 20 years, mainly due to disease and gale-force winds. The plantations have deteriorated through bad management, vandalism, and rubbish dumping. Two weeks ago the second plantation had over 100 fish and chip trays scattered either on the grass or floating in the water. With paper and other garbage in the water, it could best be described as a shambles.

There is one great threat to its present existence. On the 18th May, 1972, the Recreation Committee of Lincoln City Council decided on "A Draft Plan for the Lincoln Commons". They invited interested parties and individuals to submit their comments on the Plan to the Director of Planning. The Lincolnshire Naturalists' Union voiced its objection in principle, and made several suggestions. I did likewise.

The Plan proposes to phase-out the golf course by the 1980s, also the sports pitches. It suggests landscaping 60 acres and planting the area with trees and closing it to the public for 10 years. The two lakes are to be made into one large sheet of water and a cafe built nearby. Four car parks are to be laid out, also a caravan site and a camping area. All grazing to be ceased and the South Common to be made into a "Country Park".

If this scheme comes into being it means that there will be a 75 per cent loss of the flora, a big reduction in the breeding habitats for the birds and the destruction of the last remaining large tract of natural pasture land left in Lincolnshire. However, before this can take place, the Lincoln Corporation Act (1915) must be rescinded, and a new Act passed in Parliament.

Acknowledgements

I am grateful to the following for assistance in identification: Miss E. J. Gibbons (flora), Mrs. I. Weston (grasses), Mr. H. J. Houghton (fungi) and Mr. J. H. Duddington *(lepidoptera)*.

A FURTHER NOTE ON THE OCCURRENCE OF *Orobanche purpurea* JACQ. (BLUE BROOMRAPE) IN LINCOLNSHIRE

Mrs. I. Weston, b.sc.

Following my paper in 1973 Transactions (*Trans. L.N.U.* XVIII, 2, 79), Mr. Sydney Cox has provided further information from his field notes about the first record. I quote:

"13 July, 1929. This afternoon I visited Immingham Dock and was shown the spot where the Purple Broomrape occurs. This plant is parasitic on Yarrow and is fairly plentiful over a small area. So far as I know there is no previous record for the County".

I am most grateful to Mr. Cox for this corrected information, as it emphasises the importance of the original record and clarifies its status. The previous record had been classed in Div. 4 as alien. Mr. Cox also recorded about eighty different species of plants from the immediate area.

The species flourished in the Killingholme locality in 1974 and the numbers of plants of *Orobanche minor* had increased. Efforts are being maintained to try to conserve sufficient habitat to enable the very rare native *Orobanche purpurea* to survive in this County.

BOTANY

Miss E. J. Gibbons, f.l.s.

Several meetings were spoilt by rain but on the whole it was a reasonably good year for recordings.

Temple Wood, Aslackby. The old part of this large wood was full of spring flowers, but the northern part where conifers have been planted recently has no indigenous plants. The edges of the concrete bomb dumps produced a few unrecorded plants.

Brumby West Common Reserve. An interesting small area of sand and water with deep pits recolonising with a good number of aquatic plants. Some of the members moved on to Brumby Wood which is very rich in woodland plants. The Small-leaved Lime *(Tilia cordata)* is on the lower slopes and Wood Barley *(Hordelymus europaeus)* is a recent record for north-west Lindsey.

Hardy Gang Wood. This was a well attended mid-week meeting with plenty of woodland flowers, including Butterfly Orchid, much coppiced Small-leaved Lime, Hazel, Aspen, also Oak, Birch and a few bushes of Alder Buckthorn.

Benniworth. It was very pleasant going from Donington Mill through damp meadows towards Benniworth Haven beside the River Bain, with Purple Marsh Orchids, Ragged Robin and Water Forget-me-nots. Up near the old railway some sandy soil produced a different type of habitat with heath Bedstraw and Wavy Hairgrass.

Laughton Common. A very pleasant afternoon among Bell Heather and ponds. Great Water Dock, Yellow Watercress and Golden Dock were the best plants seen.

Dunsby Wood. The woodland flowers were finished except for the Nettle leaved Bellflower which made a good show. Wood Groundsel was found in one part of the wood.

Aswarby Thorns. A lonely fine day but not many flowers were seen, as this is not a really old wood, being under 200 years old. Hairy, Square stalked and Trailing St. John's Wort were seen.

Scotgrove Wood. This was the Fungus Foray. Wild Service Tree and Small-leaved Lime were noticed and one patch of Broad-leaved Helleborine in fruit. There had been a good show of Purple Loosestrife among young trees.

Vice-County Records

Frankenia laevis	Div. 11	K. R. Payne
Galinsoga parviflora	13	E. J. Gibbons
Impatiens capensis	2	E. J. Gibbons

Division Records

Aconitum anglicum	15	E.J.G.
Cerastium atrovircus	13	E.J.G.
Engeion canadense	15	E.J.G.
Dactylorchis fuchsii	18	E. J. Redshaw
Polypodium vulgare	9	C. Walker

MYCOLOGY

H. J. Houghton

1973 proved an excellent year mycologically speaking, with several fine spells following rain. The number of species recorded has consequently been large.

Despite being rained off early at Temple Wood, Kirkby Underwood, on the 5th May, the meeting provided two new County records *(Coprinus miser* on dung and *Pyronema omphalodes* on burnt ground) and ten new records for Division 16. Benniworth was visited on the 22nd June, during a very dry period, but it produced specimens of *Bovista nigrescens* and dung incubation later produced four new County Records and five new records for Division 7. These were mainly pyrenomycetes. We were again rained off by a torrential downpour at Dunsby Wood on the 14th July after only about half an hour, but specimens from 22 species (including six myxomycetes new to the division) were collected.

The Annual Autumn Foray was held at Scotgrove Wood, which has been visited often in the past for general meetings of the Union. We were again honoured by the attendance of Miss G. M. Waterhouse and Dr. D. Reid, of Kew, and largely due to their efforts, specimens from a record 142 species were identified, providing 11 new County records and 23 new records for Division 7. There were numerous black and brown spored agarics and a cross section from most other groups of the fungi.

The find of the year was brought to light by Mrs. D. Adams and Mr. V. Knight when visiting a hazel coppice wood near Wragby in July. There were several large specimens of *Polyporus umbellatus*, new to the County and only twice before recorded in Britain (both times in Essex). One particular specimen, arising from a black sclerotium, had about 500 characteristic heads each about 3/4 to 1 inch diameter.

Specimens have been sent in this year to Dr. Lubin and the writer in quantity, and have provided us with four new county records and a long list of Divisional Records. They came from members and non-members of the Union too numerous to mention, including several school groups. Thanks are due to these people, since they provide the opportunities for the few members who are intensely interested to examine and identify specimens from a large area, and arrive at a better picture of the frequency of species over the county as a whole.

FUNGUS FORAY, SCOTGROVE WOOD

13th October, 1973

New County Records

Clitocybe phyllophila (Joss. & Konrad) P. D. Orton.
Conocybe sordida spicula forma sordida Kuhn.
Cortinarius azureovelatus P. D. Orton
Cortinarius causticus Fr.
Hypholoma ericaeoides P. D. Orton
Mycena echinipes Lasch
Psathyrella laevissima (Romagn.) Sing.
Russula emeticella (Sing.) Hora
Tubaria autochthona (Berk. & Br.) Sacc.
Stereum gausapatum. Fr.
Typhula phacorrhiza Fr.

New Records for Division 7

Agaricus silvicola
Clitocybe cerrussata; C. nebularius; Clitopilus hobsonii; Cortinarius delibutus
Entoloma rhodopolium
Inocybe obscura
Lepiota rhacodes
Leptonia sericella
Mycena alcalina; M. sanguinolenta; M. vitilis
Nolanea sericea
Panaeolus rickenii; Pluteus salicinus; Psathyrella multipedata
Grifola frondosa
Tyromyces mollis
Helotium scutula; H. aciculare; H. fructigenum
Polydesmia pruinosa

OTHER NEW RECORDS

(Number = Division; * = new to Lincolnshire County)

Phycomycetes

Mucor mucedo 5; *Pilaira anomala* 16; *Pilobolus cristallinus* 7, 16

Gasteromycetes

Bovista nigrescens 6, 7
Lycoperdon hiemale 6; *L. perlatum*, 9
**Nidularia pisiformis* (Roth.) Tul. 6

Agaricales

Agaricus silvaticus 7; *A. arvensis*, 16
Boletus piperatus 6
Coprinus velox 7; *C. plicatilis* 14; *C. comatus* 11
Crepidotus variabilis 16
Cortinarius delibutus 5; *C. hinnuleus* 14; *C. decipiens* 6; *C. glandicolor* 6; **C. traganus* (Fr. ex Fr) Fr. 7; *C. anomalus* 6; **C. fulgens* (Alb. & Schw.) Fr. 6
Collybia dryophila 3, 6; *C. fuscopurpurea* 3; *C. confluens* 6
Clitocybe rivulosa 2; *C. infundibuliformis* 6, 13; *C. geotropa* 7, 12; *C. flaccida* 7; *C. odora* 6
Conocybe lactea 6
Entoloma nitidum Quel. 3; *E. porphyrophaeus* 6; *E. nidorosus* 6
Gymnopilus penetrans 14; *G. junonius* 9
Galerina unicolor 7; *G. mutabilis* 12
Hebeloma longicaudum 9, 16; *H. mesophaeum*, 3 6; *H. crustuliniforme* 3; *H. sinuosum* 6
Inocybe cookei 10, 14; *I. geophylla* 5 & var. *lilacina* 6
Lacrymaria velutinum 5, 9, 14
Lepiota procera 3; *L. friesii* 3
Lactarius helvus 6; *L. vietus* 14; *L. quietus* 10
Lyophyllum decastes 7
Laccaria amethystea 14
Leucopaxillus giganteus 3
Mycena haematopus 16; *M. vulgaris* 3, 7; *M. vitilis* 5, 6; **M. pelianthina* (Fr.) Quél, 7, 10; *M. ammoniaca* 6; *M. pura* 8; *M. alcalina* 6; *M. inclinata* 12
Nolanea sericea 6, 14
Oudemansiella radicata 7
Pluteus lutescens 14; *P. salicinus* 5, 6, 10
Panellus mitis 14
Psathyrella hydrophilum 3; *P. spadiceogrisea* 16; *P. candolleana* 6; *P. conopilea* 6
Panaeolus rickenii 6; *P. foenisecii* 16; *P. subbalteatus* 7, 13
Psilocybe semilanceata 6
Russula heterophylla 7; *R. claroflava* 3, 7, 10; *R. fellea* 6, 14; *R. aeruginea* 14; *R. emetica* 14; *R. lepida* 14; *R. atropurpurea* 14; *R. ochroleuca* 14; *R. consobrina* 14; *R. sanguinea* 14; *R. virescens* 7; *E. cyanoxantha* 6; *R. vesca* 3, 6; *R. betularum* 6
Stropharia semiglobata, 10; *S. coronilla* 13
Tricholoma virgatum 14
Volvariella speciosa 14; *V. bombycina* 10

Polyporaceae

Coriolus hirsutus 14
Daedaleopsis confragosa 12
Inonotus hispidus 3, 9

Leptaporus stipticus 5
Meripilus giganteus 10
**Polyporus umbellatus* Pers. ex Fr. 7; *P. brumalis* 10
Pseudotrametes gibbosa 16
Bjerkandera adusta 3, 6; *B. fumosa* 7

Other Basidiomycetes

Exidia albida 16; *E. glandulosa* 16
Coniophora puteana 6
Stereum rugosum 3
Peniophora quercina 5, 6
Thelephora terrestris 14
Calocera cornea 3; *C. stricta* 7

Discomycetes

Ascobolus furfuraceus 5
Dasyscyphus niveus 13
Helotium scutula 3; *H. aciculare* 13
**Helvella sulcata* Afz. ex Fr. 5
**Hyaloscypha leuconica* (Cooke) Nannfeldt 14
Lasiobolus ciliatus on rabbit pellets 5, 7
Mollisia cinerea 3
Morchella semilibera 6, 7, 16
Peziza cerea 2
Paxina acetabulum 5
**Pyronema omphalodes* (Bull. ex St. Amans) Fuckel 16

Pyrenomycetes

Diatrype disciformis 5
**Lasiosordaria coprophila* (Fr.) Chenantais 7
**Podospora decipiens* (Winter) Niessl 7
Saccobolus versicolor 7
Sporormia intermedia 7

Myxomycetes

Arcyria denudata 14
Ceratiomyxa fruticulosa 14; *Comatricha nigra* 16
Craterium minutum 16; *C. leucocephalum* 16
Diderma hemisphericum 16
Didymium iridis 7
Fuligo septica 14, 16
Stemonitis axifera 16

BRYOLOGY AND LICHENOLOGY

M. R. D. Seaward, M.Sc., PH.D., F.L.S.

Herbaria containing Lincolnshire bryophytes and lichens

An attempt has been made during the past year to ascertain the location and extent of herbarium material with a view to eventually publishing *A Preliminary List of British Herbaria with Lincolnshire Bryophyte and Lichen Holdings.* The following list of herbaria gives some measure of the extent of the search to date, and although it provides supplementary data to the bryophyte and lichen checklists (Seaward, 1969 and 1970 respectively) it should be regarded only as tentative. Other national, regional and private herbaria contacted during this survey are known to contain odd packets (*e.g.,* Ipswich and Keighley Museums, and Birmingham and Leicester Universities), but these have been omitted here pending a more thorough appraisal of the contents. Collections containing a high degree of duplicate exchange material have also been omitted at this stage. I will be pleased to hear of additions, especially private herbaria, and corrections to this list.

Bootle Library, Museum and Art Gallery
: A donation of 208 specimens of British mosses made in 1904 by W. W. Mason, which no doubt contained some of his Lincolnshire material, is unfortunately lost. According to Mr. A. R. Hardman, Director since 1950, this item has never been in the collections for this period; during the 1939-45 War the building was used as the A.R.P. headquarters, and parts of the collections were stacked in basement rooms and were destroyed or damaged beyond restoration; there is no indication of this collection having been passed to any other institution.

Bradford, Cartwright Memorial Hall
: Comprehensive details of the bryophyte and lichen collections from Lincolnshire are to be found in Seaward, 1967 and 1968.

Bristol University, Botany Department
: Few interesting bryophytes collected by H. P. Reader between 1906 and 1914.

British Bryological Society Collection, temporarily housed at the National Museum of Wales, Cardiff
: Undetermined number of packets of voucher bryophyte material to substantiate vice-county records of mainly G. H. Allison, J. H. Chandler and M. R. D. Seaward.

British Museum (Natural History), London
: A few bryophytes, mainly rarities collected by G. H. Allison in the 1930's, and the occasional lichen.

Cambridge University, Botany School
: Interesting annotated and interleaved copy of F. A. Lees' *Outline Flora of Lincolnshire* including the odd pressed bryophyte.

Cardiff, National Museum of Wales
: A few bryophytes collected by A. R. Horwood and H. P. Reader from Skegness.

Chandler, J. H., Stamford (private collection)
: Approximately 1000 bryophyte packets (some containing two or more species) collected from within 10-15 miles of Stamford and therefore containing material from Leicestershire and Northamptonshire as well as Lincolnshire. Also approximately 250 lichen packets with contents and collections similar to those for bryophytes.

Commonwealth Mycological Institute, Kew.
: A few lichens, mainly collected by D. L. Hawksworth and M. R. D. Seaward.

Croydon Natural History and Scientific Society
: Only four bryophytes remain of H. F. Parsons' extensive collections from Lincolnshire; it seems likely that Parsons, or some other person, abstracted the Lincolnshire specimens (see Seaward, 1964*b*).

Edinburgh, Royal Botanic Garden
: A few bryophytes made by various collectors.

Goole Public Library
: Two volumes of the Goole Scientific Society are at present housed here, but the bryophyte and lichen material to support the extensive activities of this once-flourishing society is missing. The material is thought to have been housed together at one time; some, mainly that of H. F. Parsons, has been scattered into numerous herbaria, *e.g.*, Bradford, Croydon, Lincoln, Taunton and Seaward.

Grimsby and District Antiquarian and Naturalists' Society
: This once-active society could boast amongst its number three or four energetic bryologists. Some of J. J. Marshall's and A. Bullock's collections have found their way into the herbaria of Leeds, Lincoln and Seaward, but those thought to have been transferred to Hull were destroyed during the 1939-45 War. Any remaining material at Grimsby is reported to have been committed to the incinerator.

Hull Museum
: J. J. Marshall's main bryophyte collection, which was housed here, perished during the 1939-45 War (see Seaward, 1962).

Kew, Royal Botanic Gardens
: The bryophyte and lichen collections, which contain a few Lincolnshire specimens, were moved to the British Museum Cryptogamic Herbarium in 1969 (see Brenan & Ross, 1970).

Leeds University, Botany Department
: Numerous bryophytes, mainly those collected by J. J. Marshall (see Seaward, 1964*a*).

Lincolnshire Naturalists' Union Collection, housed at the City and County Museum, Lincoln
: Approximately 1100 packets of bryophytes, mainly collected by G. H. Allison, A. Bullock, J. H. Chandler, W. Fowler, W. Heath, A. Holderness, J. Larder, J. J. Marshall, H. F. Parsons, F. Rose, M. R. D. Seaward, S. C. Stow, E. C. Wallace and E. A. Woodruffe-Peacock; also a few packets of lichens, mainly collected by W. Heath and M. R. D. Seaward.

Nottingham Museum, Wollaton Hall
: Undetermined number of bryophyte packets forming part of a general collection made by H. Fisher in the Grantham area, together with a few lichen packets (see Seaward, 1968*b*).

Seaward, M. R. D., Leeds (private collection)
: Approximately 1100 bryophyte packets, mainly collected by G. H. Allison, P. Bourne, A. Bullock, J. H. Chandler, W. Heath, A. Holderness, F. A. Lees, J. J. Marshall, E. J. Redshaw, F. Rose, M. R. D. Seaward and E. C. Wallace; also approximately 480 packets of lichens mainly collected by D. Blanchard, J. H. Chandler, W. Heath, M. R. D. Seaward and N. Wallace.

Shaw, G. A., Leeds (private collection)
: A few packets of bryophytes collected by J. J. Marshall from the Grimsby area (1910-1915), and not included in Seaward, 1962 and 1964*a*.

Taunton, Somerset County Museum
: Bryophyte material of H. F. Parsons' incorporated into general herbarium, but none from Lincolnshire noted.

Wallace, E. C., Sutton (private collection)
: Undetermined number of bryophyte packets in general herbarium, mainly obtained from G. H. Allison through the Moss Exchange Club; majority of material collected by E. C. Wallace to be found in herbaria of British Bryological Society, Lincolnshire Naturalists' Union and Seaward.

New Divisional moss records

Numbers and nomenclature according to Warburg (1963)

1/8 *Sphagnum squarrosum* Pers. ex Crome 17 (Redshaw — 1973); this and the following record are noteworthy for their extension of county distribution (cf. Seaward, 1963)

1/19 *S. fimbriatum* Wils. 17 (Redshaw — 1973)

5/7 *Polytrichum juniperinum* Hedw. 9 (Walker — 1972)
22/2 *Dicranella schreberana* (Hedw.) Dix. 10 (Chandler — 1972); first record for Lincolnshire since 1896
27/1 *Dicranoweisia cirrata* (Hedw.) Lindb. 9 (Walker — 1972) and 17 (Redshaw — 1972)
29/13 *Dicranum scoparium* Hedw. 9 (Walker — 1972)
36/3 *Aloina ambigua* (B. & S.) Limpr. 3 (Walker — 1972)
55/2 *Grimmia apocarpa* Hedw. 9 (Walker — 1972)
79/14 *Mnium punctatum* Hedw. 17 (Redshaw — 1973)
81/3 *Aulacomnium androgynum* (Hedw.) Schwaegr. 9 (Walker — 1972) and 17 (Redshaw — 1972)
98/2 *Orthotrichum anomalum* Hedw. 10 (Walker — 1972)
146/1 *Pseudoscleropodium purum* (Hedw.) Fleisch. 9 (Walker — 1972)
149/4 *Plagiothecium denticulatum* (Hedw.) B., S. & G. 17 (Redshaw — 1973)

New Divisional hepatic records

Numbers and nomenclature according to Paton (1965)

12/3 *Riccardia sinuata* (Dicks.) Trev. 17 (Chandler — 1966)
15/1 *Metzgeria furcata* (L.) Dum. 17 (Redshaw — 1973)
33/4 *Calypogeia fissa* (L.) Raddi 1 (Seaward — 1968) and 17 (Redshaw — 1973)
57/1 *Lophocolea bidentata* (L.) Dum. 9 (Walker — 1972)
57/2 *L. cuspidata* (Nees) Limpr. 17 (Redshaw — 1972)

New Divisional lichen records

Nomenclature mainly according to James (1965); new vice-county records indicated by an asterisk.

Anaptychia ciliaris (L.) Körb. 15 (Lambley — 1973); first record for Lincolnshire this century — see James and Rose (1973) for details of past and present distribution and status of this taxon in the British Isles
**Bacidia chlorococca* (Stiz.) Lett. 11 (Seaward — 1963); new county record
B. umbrina (Ach.) Bausch 15 (Seaward — 1973)
Buellia punctata (Hoffm.) Massal. 15 (Lambley — 1973)
Caloplaca citrina (Hoffm.) Th. Fr. 9 (Seaward — 1963)
C. decipiens (Arnold) Jatta 15 (Seaward — 1973)
C. murorum (Ach.) Th. Fr. 15 (Seaward — 1973)
Candelariella aurella (Hoffm.) Zahlbr. 9 (Seaward — 1963)
**C. xanthostigma* (Ach.) Lett. 8 (Seaward — 1971) and 15 (Lambley — 1973); the division 8 record is the first for the county
Cladonia chlorophaea (Flörke ex Sommerf.) Spreng. 9 (Walker — 1972)
C. conista (Ach.) Robb. ex Allen 9 (Walker — 1972)
C. fimbriata (L.) Fr. 9 (Seaward — 1963)
C. rangiformis Hoffm. 9 (Walker — 1972)
**Cyphelium sessile* (Pers.) Trev. 15 (Seaward — 1973); this is a parasymbiont on *Pertusaria coccodes*
**Lecanora contorta* (Hoffm.) Steiner 15 (Seaward — 1973); new county record
**Micarea prasina* Fr. (= *Catillaria prasina* (Fr.) Th. Fr. in James, 1965) 15 (Seaward — 1973)
Ochrolechia turneri (Sm.) Hasselr. 15 (Lambley — 1973)
**Pertusaria albescens* (Huds.) Choisy & Wern. var. *albescens* (Lambley — 1973)
**P. coccodes* (Ach.) Nyl. 15 (Seaward — 1973)
Physcia nigricans (Flörke) Stiz. 15 (Seaward — 1973)
P. orbicularis (Neck.) Poetsch 9 (Seaward — 1963)
P. pulverulenta (Schreb.) Hampe 15 (Lambley — 1973); probably the first county record this century — the Watson (1953) entry for VC 54 is based no doubt on the unlocalized record of Lees (1892) and Watson's VC 53 entry has been untraced.
P. tenella (Scop.) DC. em. Bitt. 9 (Walker — 1972)
Protoblastenia monticola (Ach.) Steiner 15 (Seaward — 1973)
Ramalina farinacea (L.) Ach. 15 (Seaward — 1973); delete brackets from this division entry in Seaward (1970). The present status of this taxon, and its various chemical "varieties", is under review for Lincolnshire.
Rinodina subexigua (Nyl.) Oliv. 15 (Seaward — 1973)
Verrucaria hochstetteri Fr. 15 (Seaward — 1973)
Xanthoria candelaria (L.) Th. Fr. 15 (Lambley — 1973)
X. elegans (Link.) Th. Fr. 15 (Seaward — 1973)

Acknowledgements

I should like to express my thanks to Miss W. Heath, Mr. J. H. Chandler, Mr. P. M. Lambley, Mr. E. J. Redshaw and Mr. C. Walker for their field work in the county, and to Mrs. J. A. Paton, Mr. B. J. Coppins, Mr. M. F. V. Corley and Mr. E. C. Wallace for their help in the determination of the more critical material.

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VERTEBRATE ZOOLOGY

M. Johnson, f.z.s.

A one-day Mammal Course held at the Riseholme College of Agriculture on April 14th was well supported by Union members who all helped to make it a success. The College staff also helped to make things run smoothly and the tour of the Riseholme Farm Woodlands to inspect squirrel damage was particularly appreciated by all present.

MAMMALIA

This year an interesting report on the suspected sighting of a Pine Marten in Laughton Forest during the autumn of 1972 has been passed on to me by Mr. F. Brasier. I would welcome any further information on Pine Marten sightings from this or other localities in the county.

A badger cub which was found poisoned on land near Grebby Hall was sent in to the Museum by Mr. W. G. Hoff. During August eight hedgehogs were seen wandering along a main road near Reepham Village in daylight. Stubble burning had caused these animals to become so alarmed that they could not even be induced to roll into their protective position.

Harvest Mouse records continue to come in from very varying habitats. Nests have been found in buckthorn bushes on the Gibraltar Point Reserve, on Surfleet Marsh and on the Moor Farm Reserve. A dead specimen in excellent condition was handed to me by Miss Goom after it had been brought in by her cat.

Noctule bats have been observed in flight at Glentworth, Horncastle and Newball. Pipistrelle bats have been examined at Owmby, Fiskerton, Barlings and Glentworth. Mr. E. Clipson also reports an increase in the numbers of Pipistrelles at Carrington, and large numbers were reported from Burton by Mr. I. Osterfield who counted 265 as they left a colony in a house-loft.

REPTILIA AND AMPHIBIA

Adders have been reported from their usual localities at Linwood, Scotton and Kirkby Moor. Grass snakes have been seen at Stapleford, Gibraltar Point and Grimsthorpe. Common Lizards reported from Riseholme and Cherry Willingham and from various places along the Lincolnshire Coast.

ENTOMOLOGY

J. H. Duddington

Butterflies

Generally speaking 1973 was a good year for butterflies. Since the ban on the use of the more dangerous pesticides the populations of many species of butterflies have recovered. The Orange-tip (*Anthocaris cardamines*) is now common and has been found breeding in town gardens, the Brimstone *(Gonepteryx rhamni)* is still extending its range and Graylings *(Eumeris semele)* in the isolated colony near Scunthorpe were numerous.

Mr. A. E. Smith records the Holly Blue *(Celastrina argiolus)* from Boston (no second brood), Green Hairstreak *(Callophrys rabi)* from Holywell and White-letter Hairstreak (*Strymonidia w-album)* from Castle Bytham. Mr. R. E. M. Pilcher observed the Brown Hairstreak *(Thecle betulae)* and Purple Hairstreak *(T. quercus)* at Woodhall; a larva was taken when beating Oak at Laughton Common where this species occurred in the 1950s.

The Common Browns had a good year with one exception; the Gatekeeper (*Maniola tithonus)* was scarce in some parts of the County. The Essex Skipper (*Thymelicus lineola)* is still spreading northwards, but there are no records of the Chequered Skipper *(Carterocephalus palaemon)* for 1973 it may now be extinct in the County. The only record of Fritillaries was three flying along a railway cutting near Walesby in July but they could not be identified.

The Vanessids had a good year. Red Admirals *(Vanessa atalanta)* were abundant, over 40 being seen in a garden feeding on fallen fruit. The Small Tortoiseshell *(Aglais urticae)* was also common and the Peacock *(Nymphalis io)* about average and one or two single records of the migrant Painted Lady *(Vanessa cardui)*.

Butterflies

764. Speckled Wood (*Pararge aegeria*) — Bardney (A.E.S.; E.M.)
799. Chalkhill Blue (*Lysandra coridon*) — Ancaster (M.C.T.; E.M.; W.A.P.)
803. Holly Blue (*Celastrina argiolus*) — Boston (A.E.S.), Salmonby (J.H.D.)
806. Green Hairstreak (*Collophrys rubi*) — Holywell (A.E.S.), Gibraltar Point (R.E.M.P.)
807. Brown Hairstreak (*Thecla betulae*) — Woodhall area (R.E.M.P.)
808. Purple Hairstreak (*T. quercus*) — Woodhall (R.E.M.P.); Laughton (J. H. D.)
809. White-letter Hairstreak (*Strymonidia w-album*) — Woodhall (R.E.M.P.); Castle Bytham (A.E.S.)
822. Dingy Skipper (*Erynnis tages*) — Little Scrubbs (M.C.T.); Bardney Forest (A.E.S.); Copper Hill (W.A.P.)
823. Grizzled Skipper (*Pyrgus malvae*) — Little Scrubbs (M.C.T.); Bardney Forest (A.E.S.); Copper Hill (W.A.P.)
826. Essex Skipper (*Thymelicus lineola*) — Boston (A.E.S.; M.C.T.)

Moths

Many interesting species of moths were recorded but numbers were down especially in the north of the County where some well established species did not come to sugar or light. The highlight of the year was the invasion of the Bedstraw Hawk *(Celerio galii)*. Not since 1888 have these moths invaded the country in such great force. Mr. R. E. M. Pilcher found 50 larvae in the south of the County and three larvae were also found feeding on Fuchsia in a Grimsby garden.

We have a new County record from Mr. R. E. M. Pilcher: a pug *(Chloroclystis chloerata)* discovered in the Lincoln-Wragby area. This species was found on 16th April, 1971 in Surrey and was new to the British list.

The capture at Ancaster of the Brown Scallop *(Philereare vetulata)* by M. C. Townsend was a very interesting record as this species is only found where buckthorn grows. The last record in the County was about the turn of the century.

Moths

The more interesting species recorded are given below.

61. Alder (*Apatele alni*) — Moor Farm (R.E.M.P.)
69. Light Knotgrass (*A. menyanthidis*) — Scotton (J.H.D.)
71. Coronet (*Craniophora ligustri*) — South Thoresby & Hoplands (R.E.M.P.)
90. Twin-spotted Wainscot (*Nonagria geminipuncta*) — South Thoresby (R.E.M.P.)
91. Brown-veined Wainscot (*N. dissoluta*) — South Thoresby (R.E.M.P.)
118. Mere Wainscott (*Arenostola flusca*) — Bardney Forest (R.E.M.P.)
126. Marsh Moth (*Hydrillula palustris*) — five sites (R.E.M.P.)
132. Birds Wing (*Drypterygia scabriuscula*) — Laughton Common (J.H.D.)
150. The Crescent (*Celaena leucostigma*) — Goxhill (C.P.)
159. Double Lobed (*Apamea ophiogramma*) — Goxhill (C.P.)
188. Great Brocade (*Eurois occulta*) — Kirkby Moor (R.E.M.P.); Moor Farm (M.C.T.)
232. Deep Brown Dart (*Aporophula lutalenta*) — Moor Farm (M.C.T.)
261. Wormwood Shark (*Cucullia absinthii*) — Scunthorpe (J.H.D.)
273. Golden Rod Brindle (*Lithomoia solidagmis*) — Little Cawthorpe (R.E.M.P.)
282. Large Ranunculus (*Antitype flavicinta*) — Goxhill (C.P.)
291. Obscure Wainscot (*Leucania obseleta*) — Boston (A.E.S.); Kirkby Moor (R.E.M.P.)
293. Southern Wainscot (*L. straminea*) — Kirkby Moor (R.E.M.P.)
312. Lead-coloured Drab (*Orthosia populeti*) — South Thoresby (R.E.M.P.)
333. *Nutmeg* (*Discestra trifolii*) — Scunthorpe (J.H.D.)
339. Dogs Tooth (*Hadena suasa*) — Boston (A.E.S.); Goxhill (C.P.)
363. Pinion-streaked Snout (*Schrankia costaestrigalis*) — Moor Farm, Bardney Forest (R.E.M.P.)
376. Red Underwing (*Catocila nupta*) — Coningsby (E.M.)
387. Small Purple Barred (*Phytomerta viridaria*) — Scotton (J.H.D.)
397. Gold Spangle (*Plusia bractea*) — Lincoln (M.C.T.)
528. Scallop Shell (*Rheumaptera undulata*) — Scotton (J.H.D.)
615. Chalk Carpet (*Ortholitha bipunctaria*) — Kirton Lindsey (J.H.D.)
621. Oblique Carpet (*Orthonama lignata*) — Theddlethorpe (R.E.M.P.)
700. Purple Thorn (*Selania tetralunaria*) — Boston (A.E.S.)
720. Broad-bordered Bee Hawk (*Hemaris fuciformis*) — Little Scrubbs (M.C.T.); Kirkby Moor (R.E.M.P.); Bardney Forest (A.E.S.)
722. Humming Bird Hawk (*Macroglossum stellatarum*) — Willoughby (R.E.M.P.)
733. Bedstraw Hawk (*Celerio galii*) — Gibraltar Point, Roughton Moor (R.E.M.P.); Lincoln (M.C.T.); Grimsby (J.H.D.)
735. Convolvulus Hawk (*Herse convolvuli*) — Little Cawthorpe, Alford (R.E.M.P.)
739. Chocolate-tip (*Clostera curtula*) — Woodhall, Bardney Forest (R.E.M.P.)

I should like to express my thanks to the following members who kindly sent me their lists of records for the year: Sir W. A. Parker, Messrs. R. E. M. Pilcher, A. E. Smith, M. C. Townsend, E. Mason, C. Potts.

CONCHOLOGY [NON-MARINE]

E. J. Redshaw, f.l.s.

During 1973 over 400 new records were added to the 10 km square survey for Lincolnshire (Vice Counties 53 and 54). The main areas of under-recorded squares that remain are between Lincoln and Gainsborough (squares SK. 86, SK. 87, SK. 88, SK. 79 and SK. 89), and between Louth and Grimsby (squares TF. 38, TA. 20 and TA. 30).

The writer is grateful to Mrs. V. Wilkins and John Bratton for assistance with field work in the Hibaldstow/Brigg and the Winterton area, and to P. J. Wilson for supplying aquatic specimens taken during the course of pond and watercourse surveys.

Records of note during the year are listed below:

National: *Sphaerium solidum* (Normand)
Timberland Delph, TF/178611, Tattershall Bridge TF/196562.
Langrick Bridge TF/266475.
EJR, A. Norris, Conch. Soc. Field Meeting.

County: *Hydrobia neglecta* Muus
Frampton Marsh, TF/366385. EJR.

Vice-County: VC 54: *Pisidium moitessierianum* Paladilhe
Steeping River, TF/469607. EJR.

Monacha granulata (Alder)
Winteringham, SE/925225. J. Bratton.

SPHAERIUM SOLIDUM (NORMAND):
A FRESHWATER MUSSEL NEW TO THE BRITISH FAUNA

E. J. Redshaw, f.l.s.

Considerable excitement was generated in May when a new addition to the British molluscan fauna was located in the Timberland Delph, near Kirkstead Bridge. On 30th May a single valve of the freshwater mussel *Sphaerium solidum* (Normand) was found in the Delph, adjacent to the outfall into the R. Witham. Previously this species had only been recorded in Britain as a Pleistocene fossil in deposits at Little Oakley in Essex. On the continent the species is found in large rivers and in canals in central and eastern Europe, and has a very local distribution in the Low Countries and in northern France.

Over 200 fresh, but unoccupied valves have been taken from the original site, but no live specimens have been found. A search through a collection of the closely related *Sphaerium corneum* (L.) in Leeds Museum revealed a pair of valves of *S. solidum*. All were recorded as "taken live at Brothertoft, 1968". Subsequently, the R. Witham has been sampled from Stixwould Ferry downstream to Langrick Bridge. *S. solidum* has only been located at the Timberland Delph site, at Tattershall Bridge and at Langrick Boidge.

Old, worn shells of the mussels were not found, and this may indicate that *S. solidum* has colonised the Witham within the last decade. One can only guess at the possible means of transportation from the continent, such as could be occasioned by releasing imported fisheries stock to which *Sphaerium* fry have become attached, or by attachment to birds or insects as reported by Kew in 1893. There is the remote possibility that the species could be indigenous, and

has escaped earlier detection due to its extremely localised distribution, but one would have expected past conchologists of the stature of Roebuck, Carter and Musham to have recorded its presence. It should be remembered that C. S. Carter was particularly capable in the field of small freshwater mussels.

References:

ADAM, W., 1960. Mollusques 1. Mollusques terrestres et dulcicoles. *Faune de Belgiqeu*, p. 359.
KEW, H. Wallis, 1893. The Dispersal of Shells (London).
REDSHAW, E. J. 1974 (and NORRIS, A.) *Sphaerium solidum* (Normand) in the British Isles. *J. Conch.* Vol. 28 pt. 4 (in press).

REPORT OF THE HON. GENERAL SECRETARY, 1973-74

The Winter Programme included the usual standing events with, in addition, a totally new venture in the form of a meeting at Lincoln Museum when members were given the opportunity of inspecting the various properties of the Union deposited there over the past 75 years. In addition special lectures were given by Mr. P. Conder on 'Present-day Standards of Bird Watching" and' Mr. J. E. Lousley on "Rare Plants and their Conservation".

There have been five meetings of the Executive Committee during the past year at which the usual routine matters have been discussed. In addition the Committee has been especially concerned with the financial aspect of the Union's various publications, in particular *Transactions* in the light of the serious increase in printing costs which still continues, and various methods of meeting it are still under consideration.

The Committee received with great regret the resignation of Mrs. D. J. F. Adams as Hon. Treasurer/Membership Secretary and recorded its thanks for her work on behalf of the Union over a period of almost 15 years.

STATEMENT OF ACCOUNT from 1st January to 31st December 1972

Receipts	1972 £ p	1971 £ p
To Cash at Midland Bank 1/1/72	417·87	382·91
„ Subscriptions	346·50	358·75
„ Donations to Publication Fund	18·56	16·30
„ Sales L.N.U. Publications:		
Lincolnshire Soils	8·76	10·95
Bryophyte Check List	5·10	5·93
Transactions	13·28	17·35
Pleistocene Events	1·00	5·55
Birds of Lincolnshire	11·30	11·69
Supplement to Birds of Lincs.	12·05	26·09
Mr. A. E. Smith's Presidential Address	13·65	4·61
„ L.T.N.C. Publication Gibraltar Point Birds	1·20	1·95
„ Sale of Plants	·75	
„ Off-prints (Mr. P. J. Muskett)	9·00	
„ Tax Repayments on Covenanted Subscriptions	28·37	59·34
„ Off-Prints Presidents Address (Dr. P. E. Kent)		11·00
„ Payment for Extra Page of Transactions (Dr. P. E. Kent) ...		8·50
„ Money Received for Teas at Horncastle (Geology Meeting) ...		9·00
„ Money Received for Day Course at Riseholme	14·25	
	£901·64	£929·92
„ Midland Bank Deposit Account ... ... (Money for the publication of the "Flora of Lincolnshire")	£780·70	£752·42

Expenses	1972 £ p	1971 £ p
By Printing: 400 Transactions Vol. XVII No. 4 Pt. 1	179·00	
400 Transactions Vol. XVII No. 3 Pt. 1		114·75
430 Transactions Vol. XVII No. 4 Pt. 2	171·50	
430 Transactions Vol. XVII No. 3 Pt. 2		155·70
„ Extra Page Transactions Vol. XVII No. 3 Pt. 1		8·50
„ Off-Prints Presidential Address (Dr. P. E. Kent)		11·00
„ Off-Prints Mr. P. J. Muskett	9·00	
„ Off-Prints Bryophyte List	2·25	
„ Subscriptions to Societies: B.S.B.I., Council for Nature, B.H.S., B.T.O., C.P.R.E.	13·05	12·05
„ Stationery and Printing	7·09	17·52
„ Secretarial Expenses: Mrs. Adams, Messrs. Posnett, Robinson	20·49	20·35
„ Hire of Rooms	5·50	15·85
„ Lecturers' Expenses		6·30
„ Hire of Film (R.S.P.B.)	10·00	
„ Duplicating and Posting of Notices	95·84	93·33
„ South Humberside Group	9·30	24·10
„ Insurance for Field Meetings	3·00	3·00
„ Typing for "Flora of Lincolnshire"	9·50	9·50
„ L.T.N.C. Sale of "Gibraltar Point Birds"	1·95	11·40
„ Donation to L.T.N.C. Reserves Fund	20·00	
„ Teas at Horncastle Meeting		7·20
„ Bank Charges	1·50	1·50
„ Cash at Bank: 31st December, 1971		417·87
31st December, 1972	342·67	
	£901·64	£929·92

Audited and found correct, 9th February, 1973.

ROBERT WITHERS, *Hon. Auditor.*

STATEMENT OF ACCOUNT from 1st January to 31st December 1973

Receipts	1973 £ p	1972 £ p
To Cash at Midland Bank 1.1.73	342·67	417·87
„ Subscriptions	328·00	346·50
„ Donations to Publication Fund	13·50	18·56
„ Sales L.N.U. Publications:		
Lincolnshire Soils	·30	8·76
Bryophyte Check List	—	5·10
Transactions	11·05	13·28
Pleistocene Events	—	1·00
Birds of Lincolnshire	—	11·30
Supplement to Birds of Lincs.	4·82	12·05
Mr. A. E. Smith's Presidential Address	2·50	13·65
„ L.T.N.C. Publication Gibraltar Point Birds	—	1·20
„ Off Prints (Mr. P. J. Muskett)		9·00
„ Sale of Plants	1·50	·75
„ Tax Repayment on Covenanted Subscriptions	33·08	28·37
„ Money Received for Day Course at Riseholme	13·25	14·25
„ Gifts:		
Miss W. Heath	10·00	
Mr. P. J. Wilson (Horncastle C.C., Laughton W.I.)	2·00	
Mr. G. L. Posnett (Lincoln Junior Naturalists)	3·35	
	£766·02	£901·64
„ Midland Bank Deposit Account (Money for the Publication of the "Flora of Lincolnshire")	£843·86	£780·70

Expenses	1973 £ p	1972 £ p
By Printing: 400 Transactions Vol. XVII No. 4 Pt. 1		179·00
„ 430 Transactions Vol. XVII No. 4 Pt. 2		171·50
400 Transactions Vol. XVIII No. 1 Pt. 2	273·00	
Off Prints (Muskett)		9·00
Off Prints Bryophyte List		2·25
„ Subscriptions to Societies	13·05	13·05
„ Stationery and Printing		7·09
„ Secretarial Expenses (Mr. Posnett)	4·26	20·49
„ Hire of Rooms	16·12	5·50
„ Lecturer's Expenses (Mr. Sorenson)	14·00	
„ Hire of Film		10·00
„ Duplicating and Posting of Notices	99·74	95·84
„ South Humberside Group		9·30
„ Insurance for Field Meetings	3·00	3·00
„ Typing for "Flora of Lincolnshire"		9·50
„ Donation to L.T.N.C. Reserves Fund	20·00	20·00
„ L.T.N.C. Sale of "Gibraltar Point Birds"		1·95
„ Day Course at Riseholme 1972	13·24	
„ Day Course at Riseholme 1973	18·04	
„ Forestry Commission	2·00	
„ Bank Charges	1·50	1·50
„ Cash at Bank, 31st December, 1972		342·67
„ Cast at Bank, 31st December, 1973	288·07	
	£766·02	£901·64

Audited and found correct, 21st January, 1974.

ROBERT WITHERS, *Hon. Auditor.*

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